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Docket No.: AH-CLFR:181USD6 (PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

David H. Walker et al.

Dated: January 5, 2005

Application No.: 10/680,349

Filed: October 7, 2003

For: HOMOLOGOUS 28-KILODALTON

Signature:

IMMUNODOMINANT PROTEIN OF

EHRLICHIA CANIS AND USES THEREOF

Art Unit: 1645

Examiner: N. M. Minnifield

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, and after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Office Action or Notice of Allowance under 37 CFR 1.97(c).

A copy of each reference on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an

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admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Our check in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 06-2375, under Order No. AH-CLFR:181USD6. A duplicate copy of this paper is enclosed.

Dated: January 5, 2005

Respectfully submitted,

Melissa L. Sistrunk

Registration No.: 45,579

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APE.

Atty. Docket No. AH-CLFR:181USD6

Serial No.

List of Patents and Publications for Applicant's

Applicant

David H. Walker, et al.

NFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:

Group: 1645

Examiner: Minnifield, N. M.

U.S. Patent Documents
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Foreign Patent Documents

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Other Art See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	6,043,085	3/28/00	Yu et al.	435	325	8/27/98
	A2	6,392,023	5/21/02	Walker, et al.	536	23.1	9/12/00
	A3	6,403,780	6/11/02	Walker, et al.	536	23.1	3/3/99
	A4	60/059,353	9/19/97	Rikihisa, et al.			

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 99/13720	3/25/99	WIPO			English
	B2	WO 00/32745	6/08/00	WIPO			English
	В3	WO 98/16554	4/23/98	WIPO			English

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Anderson et al., "Ehrlichia chaffeensis, a new species associated with human ehrlichiosis," J Clin Microbiol, 29(12):2838-2842, 1991.
	C2	Anderson et al., "Ehrlichia ewingii sp. Nov., the etiologic agent of canine granulocytic ehrlichiosis" Int J Syst Bacteriol, 42(2):299-302, 1992.
V	C3	Brouqui et al., "Antigenic characterization of ehrlichiae: protein immunoblotting of Ehrlichia canis, Ehrlichia sennetsu, and Ehrlichia risticii," J Clin Microbiol, 30(5):1062-1066, 1992.
	C4	Burgess et al., "Possible dissociation of the heparin-binding and mitogenic activities of heparin-binding (acidic fibroblast) growth factor-1 from its receptor-binding activities by site-directed mutagenesis of a single lysine residue," <i>J. Cell. Biol.</i> , 111:2129-2138, 1990.
	C5	Chen et al., "Identification of the antigenic constituents of Ehrlichia chaffeensis," Am J Trop Med Hyg, 50(1):52-58, 1994.

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EXAMINER:

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (modified)		Atty. Docket No. AH-CLFR:181USD6	Serial No.	
List of Patents and Publications for	Applicant's	Applicant David H. Walker, et al.		
INFORMATION DISCLOSURE STATEMENT				
(Use several sheets if necessary)		Filing Date:	Group: 1645 Examiner: Minnifield, N. M.	
U.S. Patent Documents	Foreign I	Patent Documents	Other Art	
See Page 1		ee Page 1	See Page 1	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C6	Chen et al., "Western immunoblotting analysis of the antibody responses of patients with human monocytotropic ehrlichiosis to different strains of Ehrlichia chaffeensis and Ehrlichia canis," Clin Diag Lab Immunol, 4(6):731-735, 1997.
	C7	Dawson et al., "Serologic diagnosis of human ehrlichiosis using two Ehrlichia canis isolates," J Infect Dis, 163:564-567, 1991.
	C8	GenBank Accession Number AAY069965.
	C9	GenBank Accession Number AF078553.
	C10	GenBank Accession Number AF082744.
	C11	GenBank Accession Number AF230642.
	C12	GenBank Accession Number U72291.
	C13	GenBank Accession Number AAK28699.
	C14	GenBank Accession Number AAC68666.
	C15	GenBank Accession Number AF078555.
	C16	Groves et al., "Transmission of Ehrlichia canis to dogs by ticks (Rhipicephalus sanguineus)," Am J Vet Res, 36:937-940, 1975.
	C17	Harrus et al., "Amplification of ehrlichial DNA from dogs 34 months after infection with Ehrlichia canis," J Clin Microbiol, 36(1):73-76, 1998.
	C18	Jobling et al., "Analysis of structure and function of the B subunit of cholera toxin by the use of site-directed mutagenesis," <i>Mol. Microbiol.</i> , 5:1755-1767, 1991.
	C19	Jongejan et al., "The immunodominant 32-kilodalton protein of Cowdria ruminantium is conserved within the genus Ehrlichia," Rev Elev Med Vet Pays Trop, 46(1-2):145-152, 1993.
	C20	McBride et al., "A conserved, transcriptionally active p28 multigene locus of Ehrlichia canis," Gene, 254:245-252, 2000.
	C21	McBride et al., "Molecular cloning of the gene for a conserved major immunoreactive 28-kilodalton protein of Ehrlichia canis: a potential serodiagnostic antigen," Clinical and Diagnostic Laboratory Immunobiology, 6(3):392-399, 1999.

25489163.1

Examiner:	DATE CONSIDERED:
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List of Patents and Publications for	••	Applicant David H. Walker, et al.		
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U.S. Patent Documents Foreign F		Patent Documents	Other Art	
See Page 1		ee Page 1	See Page 1	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C22	McClure, "Mechanism and control of transcription initiation in prokaryotes," <i>Ann Rev Biochem</i> , 54:171-204, 1985.
	C23	Ohashi et al., "Cloning and characterization of multigenes encoding the immunodominant 30-kilodalton major outer membrane proteins of Ehrlichia canis and application of the recombinant protein for serodiagnosis," <i>Journal of Clinical Microbiology</i> , 36(9):2671-2680, 1998.
	C24	Ohashi et al., "Immunodominant major outer membrane proteins of Ehrlichia chaffeensis are encoded by a polymorphic mulitgene family," Infect Immun, 66(1):132-139, 1998.
	C25	Pharmacia Biotech, BioDirectory, Chapter 9, 217-236, 1996.
	C26	Reddy et al., "Molecular characterization of a 28 kDa surface antigen gene family of the tribe Ehrlichiae," Biochem Biophys Res Comm, 247(3):636-643, 1998.
	C27	Rikihisa et al., "Western immunoblot analysis of Ehrlichia chaffeensis, E. canis, or E. ewingii infections in dogs and humans," J Clin Microbiol, 32(9):2107-2112, 1994.
	C28	Shankarpappa, "Antigenic and genomic relatedness among Ehrlichia resticii, Ehrlichia sennetsu, and Ehrlichia canis," <i>Int J Syst Bacteriol</i> , 42(1):127-132, 1992.
	C29	Storey et al., "Molecular cloning and sequencing of three granulocytic Ehrlichia genes encoding high-molecular-weight immunoreactive proteins," <i>Infection and Immunity</i> , 66(4):1356-1363, 1998.
	C30	Yu et al., "Characterization of the complete transcriptionally active ehrlichia chaffeensis 28 kDa outer membrane protein multigene family," <i>Gene</i> , 248:59-68, 2000.
	C31	Yu et al., "Detection of Ehrlichia chaffeensis in human tissue by using a species-specific monoclonal antibody," <i>J. Clin Microbiol.</i> 31:3284-3288, 1993.

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EXAMINER: DATE

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